

IN THE CLAIMS

1-8 (canceled)

9. (new) A thermolabile liposome having a controlled release temperature for the liposome content, wherein said thermolabile liposome comprises at least one phosphatidylcholine with a main transition temperature in the range from 0 to 80°C and more than 15 to 70% by weight of phosphatidyl-oligoglycerol.

10. (new) The liposome as claimed in claim 9, said at least one phosphatidylcholine is selected from the group consisting of 1-palmitoyl-2-olioylglycero-3-phosphocholine, 1-stearoyl-2-olioyl-3-phosphocholine, 1-palmitoyl-2-lauroyl-glycero-3-phosphocholine, 1-behenoyl-2-olioyl-glycero-3-phosphocholine, 1-stearoyl-2-lauroyl-glycero-3-phosphocholine, 1,3-dimyristoylglycero-2-phosphocholine, 1,2-dimyristoylglycero-3-phosphocholine, 1-palmitoyl-2-myristoylglycero-3-phosphocholine, 1-stearoyl-2-myristoylglycero-3-phosphocholine, 1-myristoyl-2-palmitoylglycero-3-phosphocholine, 1,3-palmitoylglycero-2-phosphocholine, 1,2-dipalmitoylglycero-3-phosphocholine, 1-myristoyl-2-stearoylglycero-3-phosphocholine, 1-stearoyl-3-myristoylglycero-2-phosphocholine, 1-stearoyl-2-palmitoylglycero-3-phosphocholine, 1-palmitoyl-2-stearoylglycero-3-phosphocholine, 1,3-distearoylglycero-2-phosphocholine, 1,2-di-stearoylglycero-3-phosphocholine, 1,2-di-arachinoylglycero-3-phosphocholine, 1,2-di-behenoylglycero-3-phosphocholine and 1,2-di-lignoceroylglycero-3-phosphocholine.

11. (new) The liposome as claimed in claim 9, wherein said phosphatidyloligoglycerol is dipalmitoylphosphoglyceroglycerol.

12. (new) The liposome as claimed in claim 9 comprising 20 to 75% of dipalmitoyllecithin (DPPC), 10 to 25% of distearoyllecithin (DSPC) and more than 15 to 50% of dipalmitoylphosphoglyceroglycerol (DPPG2).
13. (new) The liposome as claimed in claim 9, further comprising up to 15% of at least one alkylphosphocholine.
14. (new) The liposome as claimed in claim 13, comprising 10 to 15% of at least one of hexadecylphosphocholine, oleoyl-phosphocholine or ether lysolecithin.
15. (new) The liposome as claimed in claim 9, wherein it contains no cholesterol.
16. (new) The liposome as claimed in claim 9, further comprising an active compound or a labelling substance.
17. (new) The liposome as claimed in claim 10, wherein said phosphatidyloligoglycerol is dipalmitoylphosphoglyceroglycerol.
18. (new) The liposome as claimed in claim 9, wherein the liposome consists essentially of said at least one phosphatidylcholine.